

Stated Meeting, May 5.

Present, seventeen members.

Dr. FRANKLIN BACHE, President, in the Chair.

Dr. William V. Keating and Mr. Elias Durand, recently elected members, were introduced and took their seats.

Letters were read:—

From James Lenox, dated New York, April 24, 1854; from Joshua I. Cohen, dated Baltimore, April 24, 1854; from Eli K. Price, dated Senate, April 24, 1854; from Elias Durand, dated Philadelphia, April 26, 1854; severally acknowledging the receipt of notice of their election as members of the Society.

The following donations were announced:—

FOR THE LIBRARY.

Information concerning the History, Condition and Prospects of the Indian Tribes of the United States: Collected and prepared under the direction of the Bureau of Indian Affairs, per Act of Congress of March 3, 1847; by Henry R. Schoolcraft, L.L.D. Published by authority of Congress. Part IV. Philadelphia, 1854. 4to.—

From the Commissioner of Indian Affairs.

Proceedings of the American Academy of Arts and Sciences. Vol. II. from p. 233 to end: Vol. III. p. 1 to 40. Boston. 8vo.—

From the Academy.

Proceedings of the Boston Society of Natural History. Nos. 23, 24. March, April, 1854. Boston. 8vo.—*From the Society.*

Annals of the Lyceum of Natural History of New York. Vol. VI. Nos. 2-4. April, 1854. New York. 8vo.—*From the Lyceum.*

The American Journal of Science and Arts. Vol. XVII. No. 51. May, 1854. New Haven. 8vo.—*From the Editors.*

The Medical News and Library. Vol. XII. No. 137. May, 1854. Philadelphia. 8vo.—*From Blanchard & Lea.*

Seventh Annual Report of the Regents of the University of the State of New York, on the Condition of the State Cabinet of Natural History, and the Historical and Antiquarian Collection annexed thereto. Made to the Senate, Jan. 18, 1854. Albany. 8vo.—*From the Regents.*

Report on the Utility of a uniform System in Measures, Weights, Fineness and Decimal Accounts, for the Standard Coinage of Commercial Nations. By J. H. Gibbon, M.D. of the U. S. Branch Mint, North Carolina. Charleston, 1854. 8vo.—*From the Author.*

The Duty of Columbia College to the Community, and its right to exclude Unitarians from its Professorships of Physical Science, considered by one of its Trustees. New York, 1854. 8vo.—*—Donor unknown.*

The Plough, the Loom and the Anvil. Vol. VI. No. 10. April, 1854. New York. 8vo.—*From the Editors.*

Judge Kane, pursuant to appointment, read an obituary notice of the late William Strickland, a member of the Society.

William Strickland. It is at best a melancholy office, that which I have undertaken, to trace the obituary memorial of an old and intimate friend. It calls back passages in my own life, that might willingly if not wisely be forgotten, hopes and apprehensions that we shared or sympathised in together, hopes, some of them realized happily in later years; some of them, hopes as well as apprehensions, realized to our sorrow. It brings round me the genial names we both used to delight in, Biddle, and Chapman, and Dewees, and Hopkinson, and I had almost added Patterson; of the whole group I am the only survivor. It is fitting that I should indite the farewell notice of Strickland; he would have done as much for me.

My association with him dates back to the year 1819. It began the very day he laid the foundation stone of the Bank of the United States; he came up from the work to welcome me after my marriage.

Before that time his life had been one of checkered fortunes. His father was a carpenter, a skilful artisan, for Latrobe the great architect of his day confided to him the execution of many of his plans, an honest man withal, for he never speculated, and yet died poor. His son William, a boy in the draughting room, attracted Latrobe's favour by the quickness of his eye and the facility of his pencil, as as well as by his joyous and grateful temperament. Latrobe took the charge of his education as an engineer and architect; disciplining his taste to the severe harmonies of Grecian art, that exquisite art, which he himself commemorated so perfectly in the Minerva Polias outline of the Bank of Pennsylvania, and his pupil afterwards in the portico of the Parthenon.

I scarcely know how Strickland began his early professional career. He drew the plans for the first Masonic hall that stood in Chesnut street, before he was of age; and some years afterwards devised a cunning little specimen of *bijou* architecture for the Swedenborgian Church. But there was very little for an architect or an engineer to do in Philadelphia, or indeed anywhere else about the country, when he left his master's studio. His father had died; and he was fairly adrift upon the world.

He set himself to work as a sort of artist in general; drew patterns for plasterers and carpenters, and models for machinists and patentees, aquatinted fanciful likenesses of victorious commodores and other notorieties for the shop windows, painted scenes for the theatres, (excellent ones they were,) now and then tried his hand at a street view in oil, (I have one of these, a noble perspective of old Christ Church and Second street: he sold it for two hams, ten dollars, and a box of segars, and bought it back ten years afterwards for three hundred dollars,) levelled a house plot, or computed a water power, or surveyed a field or a farm when the lines were too complex for the every day workers in mensuration; and then or in the mean while, artist like, married a wife, giving his only five dollar bill to the clergyman.

He was trying on his uniform jacket as a volunteer, the night before he was to set out for camp: it was in the fall of 1814, and all who had nothing else to do, and a good many besides, were marching off to keep away the British; when an accident brought him into more public view.

The older part of the town had turned out to make fortifications, those strange looking earth-works that many of us remember at all the road crossings, and some of which promise to remain there like Indian mounds to puzzle the coming generation of antiquaries. Dr. Patterson had been elected one of our virtuoso engineers, and he be-thought him of Strickland as another. Of course there was no difficulty in getting his commission from the committee of safety: old general Bloomfield added a furlough to relieve him from camp duty: and before six o'clock the next morning Strickland had mounted the blue cockade, and was teaching all sorts of patriotic people to toss sods to the music of a fife.

I have heard him refer much of his professional success to this trivial incident. It happened that some of our influential citizens were struck by the efficiency he manifested in his extempore office. He thought they over-valued it; though he complained for a while that,

like some heroes of more sanguinary fields, he had harvested more fame than abiding emolument. He was in truth an ill-trained economist, and having "but little here below, had not that little long." But when the Bank of the United States was incorporated a few years later, the influence of the same gentlemen secured his appointment as the architect of the new building. And from this time, so admirably exact were his estimates and so vigorous his supervision of the works under his charge, that he was the architect of Philadelphia. He constructed the Mint, the Exchange, the Naval Asylum, our two Theatres, the Mechanics and the Philadelphia Banks, the House of Employment for the Poor in Blockley ; in a word, all the buildings of note in and about the city.

While so engaged, he was called upon to direct extensive and difficult works as an engineer. He made in 1824 a reconnoissance for the Chesapeake and Delaware Canal ; and projected one of the routes across the Peninsula : I was a director of the Canal Company at the time ; and I never doubted, and there are few who doubt now, that it was the best route proposed. He was the first engineer in the service of Pennsylvania after our improvement system took a definite form, and afterwards the engineer of the eastern division of the Philadelphia and Baltimore Rail Road. He planned and executed the Delaware Break-water. He visited England as the representative of a society which was formed by a few spirited gentlemen to advance the industrial progress of the state, and made a folio series of reports, which the Society published in a liberally illustrated volume.

An anecdote occurs to me in connection with this volume, that shows the clearness of his foresight, but that exemplifies also the timorousness with which a striking truth finds general acceptance. He had witnessed the great experiment of the first locomotives, the Novelty and the Rocket, on the Liverpool and Manchester Rail Road ; and in closing his report upon their performance, he prophecied that rail roads were destined to supersede canals. I was the proof reader of his book for the time ; and when I was about to remit this passage to the printer, the Society's committee, and I think the Society itself, remonstrated strenuously against so perilous a committal on the part of a gentleman, whose opinions might be confounded with their own. In the end, I rewrote the closing paragraphs of the report at their instance, and so saved Strickland from declaring in advance what a large part of the world knows now to be true.

After many years of success in Philadelphia, he was invited to make the plan for the State Capitol of Tennessee, and subsequently

to direct its construction. It was his last great work. He died at Nashville on the 6th of April, 1854, a few weeks after completing it. The winter before his death, the Legislature of the State appropriated a crypt beneath the building as his future cenotaph; and his remains sleep there. The Capitol itself is his monument.

The characteristics of Mr. Strickland's mind were directness and simplicity. There was nothing complicated or equivocal about him. A stranger could read him like a book. He had quick powers of accurate observation. He saw every thing that was about him, and saw it truly. As he walked in the country, he marked every angle of the road, every change of level, every running stream, every tree taller than the rest. After spending the day with a friend, he could tell you the arrangements of his rooms, the number of windows in each, the height of every ceiling almost to an inch, and every accidental crack in the walls. He could labour out his professional estimates with singular minuteness and truth; but he was impatient of the process, and relied very often, and very successfully, on what seemed guess work to others, but was really with him the rapid and almost unconscious application of some well tested formula.

He was equally quick as a draughtsman: the scene-painters said he always worked with a pound brush. He made an engineering reconnoissance in less time than any man I ever saw, and could trace the line for a canal or rail road almost as soon.

Of course, he had sometimes the faults of over haste, and perhaps did not give to small appointments that measured attention that best conciliates custom. He saw the direct bearings of a question so clearly at once, that he made too little account of the collateral or remote; and though he could review his first impressions with candour in deference to the judgment of his friends, he rarely did so without their prompting.

He was not deeply studied: yet he had read and remembered the books of his profession. Like his favourite author, as described by Ben. Jonson, he had small Latin and less Greek; but he knew something of them, read French easily, and could manage a scrap of Italian when it encountered him. He was very fond of the old English poets, the humorous ones especially: he knew Shakspeare by heart, and would recite page after page of Hudibras. He had an apt wit of his own, sportive and kind spirited, that never meant to give offence, but that found utterance sometimes when it might have been discreetly silent. He was fond of merry company, and was the king of good fellows when occasion suited; at the anniversary suppers, which our

Society used to indulge in—alas, many years ago—no man was happier or made more enjoyment for the rest. He had a warm heart, direct and gallant purposes, little aptitude of disguise, too little indeed for promiscuous communion with the world.

His educated taste in matters of art became more and more severe as he grew older, till he seemed to value decoration too little. Yet he understood the beauty of flowing lines, and I have sometimes thought he purposely risked the harsh and rectangular style, lest he should be seduced by a native fondness for the ornate. But I need not criticise his works; they designate the marble æra in our Philadelphia architecture, that one which has given place to the sand stone and cast iron.

No doubt, there are features in some of his buildings, not many, I think, that a just censure may condemn. It might be uncharitable to blame him even for all of these. An architect like a lawyer, does not make the cause that engages his services. He does the best he can with it as it comes to him, and is lucky if he is not called on to defend or at least palliate by his silence faults that belong to others. He has to satisfy the wants of his employer; to disguise incongruities which no art can reconcile, to modify his designs after he has begun to execute them, in deference to the uncertain judgment of a changing committee of supervisions, to cheapen this moulding, or leave a combination undeveloped, because funds are growing scarce; and after all; it may be, that the building as it stands before us for our criticism is devoted to uses the architect never dreamt of, that his airy quadrangle has become a smoking refinery, or his deep groined arches are hid above a canvass ceiling. No man need satirise the architectural eccentricities in some of the buildings that bear Strickland's name with more unsparing wit than he used to do himself.

He became a member of the American Philosophical Society in 1820, and was about 65 years old when he died.

Dr. Boyé exhibited a small apparatus to show certain vibrations caused by heat.

It consists of a very thin compound bar or spring of platinum and silver, such as is used in the construction of Breguet's Thermometers, placed in a vertical position. When the flame of a spirit lamp is placed in close proximity to the silver side of the spring, it is thrown into rapid vibrations. These vibrations were first noticed by Mr. Wygandt, of this city. Dr. Boyé thought there was nothing new in

the principle, still the vibrations were curious, and as interesting as any other of the many vibrations produced by heat or galvanism.

The vibrations are caused by the alternate actions of the heat of the lamp, bending the bar away from its influence, and of the consequent rapid cooling, which straightens it, throwing it back again within the former influence, this vibrating motion being assisted by the elasticity of the bar. Its approach to a red-hot bar or ball of iron produces the same effect. The vibrations do not take place when the platinum side of the spring is turned towards the source of heat, or when the action on the silver side is made perfectly uniform, as by bringing it under the influence of a thick red-hot iron bar bent in the shape of the curve, which it assumes by the heat received from it, or if heated by a very steady column of hot air striking, as before, against its silver side, but placed in such a position that the bending of it does not throw it out of the influence of the heating current.

Judge Kane made a verbal report from the committee appointed in February last, upon the subject of providing more extended and convenient accommodations for the Library of the Society, and moved that an appropriation of \$2000 be placed at the disposal of the committee, and that they be authorized to expend such amount, not exceeding that sum, as may be necessary for the object of their appointment:—Which motion was agreed to and the appropriation made by the Society.

Stated Meeting, May 19.

Present, nine members.

Dr. FRANKLIN BACHE, President, in the Chair.

A letter was read from the Corresponding Secretary of the Wisconsin Historical Society, dated Madison, Wisconsin, May 10, 1854, soliciting an exchange of publications with this Society.

The following donations were announced:—

FOR THE LIBRARY.

Quarterly Journal of the Chemical Society. No. XXV. Vol. VII. 1.
April, 1854. London. 8vo.—*From the Society.*